

Remarks

Upon entry of the foregoing amendments, Claims 1-20 are pending. Claims 1, 4, 7 and 10 are amended; Claims 13-16 have been added. In view of the amendments and following remarks, Applicant respectfully requests reconsideration by the Examiner, and advancement of the application to allowance.

35 U.S.C. § 112

The Examiner rejects Claims 1-20 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Applicants have amended Claims 1, 7, 12, 18 and 19 to overcome the Examiner's rejection. Applicants note that "N,N,N'-trimethyl-aminoethyl-ethanolamine" is listed as a possible name under the National Chemical Inventories list. (See Annex) Applicants submit that Claims 1-20 are in condition for allowance.

35 U.S.C. § 103

The Examiner rejects Claims 1-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,602,927 issued to Andreas Rothacker (hereinafter "Rothacker").

Claim 1, as amended, recites a catalyst useful in the formation of polyisocyanurate foam, comprising, among other elements, "an amine component comprising 2(2-Dimethylaminoethyl)methylamino-ethanol."

Claims 7 and 12, as amended, recite a process for producing an isocyanurate foam product, comprising, among other steps, providing "an amine component comprising 2(2-Dimethylaminoethyl)methylamino-ethanol."

Applicants respectfully submit that the cited reference fails to disclose every element of Applicants' invention. Rothacker fails to teach a catalyst useful in the formation of polyisocyanurate foam, comprising, "an amine component comprising 2(2-Dimethylaminoethyl)methylamino-ethanol," as recited by amended Claim 1. Rothacker also fails to teach a process for producing an isocyanurate foam product, comprising, providing "an amine component comprising 2(2-Dimethylaminoethyl)methylamino-ethanol," as recited by amended Claims 7 and 12. The cited reference fails to disclose the recited limitations and cannot render obvious amended Claims 1, 7 and 12.

Examiner argues that an "obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." (Paper No. 20051001, Page 4). Applicants submit that the new compound does not have similar properties, rather it has different qualities. Namely, 2(2-Dimethylaminoethyl)methylamino-ethanol acts as a catalyst to promote trimerization of isocyanates while other known tertiary amines do not promote the trimerization of isocyanates. Prior references only teach tertiary amines acting as blowing agents or gelling agents, not as trimerization catalysts. Applicants submit that Figure 1 provides support for this assertion. Figure 1 compares trimerization levels between the following samples: one without a catalyst (No Cat), two having a traditional alkali metal trimerization catalysts (KA and KO), seven tertiary amines (PMDETA, ZF-10, ZF-20, ZR-40, ZR-50, TR-90, and Z-80), and 2(2-Dimethylaminoethyl)methylamino-ethanol (Z-110). The two traditional alkali metal catalysts (KA and KO) show an increase in trimerization after 400 seconds to reach an Absorbance of 0.3 (the y-axis of Figure 1

shows an increased level of Absorbance with increased trimerization content). The No Cat sample and seven tertiary amines have a trimerization content that levels off just above an Absorbance of 0.1. The references cited and Rothacker would teach that 2(2-Dimethylaminoethyl)methylamino-ethanol (Z-110) should follow the pattern of the seven tertiary amines; rather, the Z-110 after 600 seconds spikes the trimerization content to an Absorbance level above 0.3. This data shows that the Z-110 acts differently than the other tertiary amines by acting as a trimerization catalyst. Applicants argue that Rothacker does not teach, suggest, or make obvious that a tertiary amine, such as 2(2-Dimethylaminoethyl)methylamino-ethanol, could act as a trimerization catalyst. Applicants submit that Rothacker does not render their invention obvious.

Given that Claims 2-6 depend from Claim 1, Claims 8-11 depend from Claim 7 and Claims 13-20 depend from Claim 12, Applicants respectfully submit that Claims 2-6, 8-11 and 13-20 are allowable. As such, Applicants respectfully request that the Examiner withdraw the rejections under 35 U.S.C. § 103 (a) and allow Claims 1-20.

Change of Correspondence Address

Applicants also submit an application for change of correspondence address.

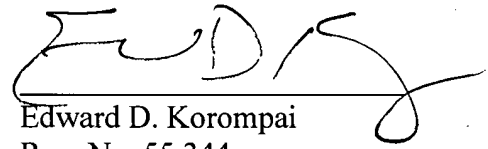
Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is now in condition for allowance, and respectfully request issuance of a Notice of Allowance directed towards the pending Claims.

Should any fees be due in connection with the filing of this document, the Commissioner for Patents is hereby authorized to deduct said fees from Huntsman Corporation Deposit Account No. 08-3442.

Please date stamp and return the enclosed postcard acknowledging receipt of this material.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'E D K', with a long horizontal stroke extending to the right.

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Reg. No. 55,344
Attorney for Applicants

Date: 2-13-06

CAS REGISTRY NUMBER:

2212-32-0

EINECS No. 218-658-4

ENCS No. 2-3206

ECL Serial No. KE-11150

INVENTORY NAME(S):

Ethanol, 2-[[2-(dimethylamino)ethyl]methylamino]- (TSCA, DSL, AICS, PICCS, ASIA-PAC)

2-[[2-(Dimethylamino)ethyl]methylamino]ethanol (English, French, German) (DSL, EINECS, ENCS, ECL)

2-[[2-(dimetilamino)etil]metilamino]etanol (Spanish) (EINECS)

ETHANOL, 2-{[2-(DIMETHYLAMINO)ETHYL]-METHYLAMINO}- (PICCS)

OTHER NAME(S):

2-[[2-(Dimethylamino)ethyl]methylamino]-ethanol

Dabco T

Jeffcat Z 110

N,N,N'-Trimethyl-*N'*-(2-hydroxyethyl)-1,2-ethanediamine

N,N,N'-Trimethyl-*N'*-(hydroxyethyl)ethylenediamine

N,N,N'-Trimethylaminoethyl ethanolamine

N-(Dimethylaminoethyl)-*N*-methylethanolamine

N-[2-(Dimethylamino)ethyl]-*N*-methylethanolamine

RX 5

Toyocat RX 5

ENCS CLASSIFICATION:

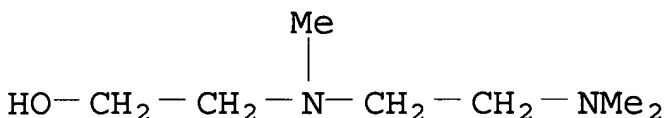
Low Molecular Chain-like Organic Compounds.

Inventory Update Rule (IUR):

This chemical was reported under the TSCA Inventory Update Rule for the following reporting period(s): 1986, 1990, 1994, 1998.

FORMULA:

C₇H₁₈N₂O



Annex to Response to Office

Action mailed 10/6/2005

Application Serial No. 10/521,102

Attorney D# 81,603